

VSSC6 TRCL24VAC/DC0.5A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Overvoltage coupling along the conductor path may disturb or destroy sensitive signal inputs. It is important to provide protection in the immediate vicinity of I&C devices. Weidmüller's broad product range for the I&C sector offers products in a 2-piece, pluggable design and modular terminals for tension clamp or screw connection. These products are suitable for both binary and analogue signals. Weidmüller also offers other designs with integrated components such as gas discharge tubes or varistors. VARITECTOR stands for flexible and variable surge protection by Weidmüller, tested according to product standard IEC 61643-21. The VARITECTOR series can be used in applications according to IEC 61643-22 / VDE 0845-3 for classes C1, C2, C3 and D1. The VARITECTOR SPC, SSC and MCZ OVP product families optimally combine electrical and mechanical properties. Size and easy handling play an important role. This surge protection is suited for confined spaces in industrial and process automation as well as in building automation applications.

General ordering data

Version	Surge protection for instrumentation and control, 24 V, 34 V, 500 mA, IEC 61643-21, HART-compatible
Order No.	1064230000
Type	VSSC6 TRCL24VAC/DC0.5A
GTIN (EAN)	4032248829590
Qty.	10 pc(s).

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Technical data**Dimensions and weights**

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.484 inch
Net weight	43.4 g	Width	6.2 mm
Width (inches)	0.244 inch		

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-40 °C...70 °C
Humidity	5...96 %		

Probability of failure

SIL PAPER	SIL Paper	SIL in compliance with IEC 61508	2
MTTF	6,008 Jahre	SFF	89.74 %
λges	19	PFH in 1*10 ⁻⁹ per hour	1.95

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
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CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. I _I	500 mA
Input voltage, max. U _i	42 V	Internal capacity, max. C _I	1 nF
Internal inductance, max. L _I	0 μH		

General data

Colour	black	Design	Terminal
Isolating function	Yes	Optical function display	No
Protection degree	IP20	Rail	TS 35
Segment	Measurement - Monitoring - Setting	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
UL 94 flammability rating	V-0	Version	Surge protection for measurement and control

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Technical data

Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 μ s) wire-PE

5 kA

Discharge current I_n (8/20 μ s) wire-PE

2.5 kA

Discharge current, max. (8/20 μ s)

10 kA

Insertion loss

250 MHz

Lightning test current, I_{imp} (10/350 μ s)

Wire-PE

0.5 kA

Max. continuous voltage, U_c (DC)

42 V

Overload - failure mode

Modus 2

Protection level U_p for C1 with
500V/250A (wire-PE)

456 V

Protection level U_p for C2 with
10kV/5kA (wire-PE)

960 V

Protection level U_p for C3 with 1kV/ μ s
(wire-PE)

572 V

Protection level U_p for D1 with 0.5kA
(wire-wire)

94 V

Protection level, U_p wire - wire

90 V

Rated current I_N

500 mA

Rated voltage (DC)

34 V

Signal transmission properties (-3 dB)

270 Mhz

Surge current-carrying capacity C2

2.5 kA 8/20 μ s 5 kV
1.2/50 μ s

Surge current-carrying capacity D1

0.5 kA 10/350 μ s

Volume resistance

1.8 Ω 10 %Discharge current $I_{\max}$ (8/20 μ s) wire-

wire

5 kA

Discharge current I_n (8/20 μ s) wire-wire

2.5 kA

Fuse

0.5 A

Lightning test current I_{imp} (10/350 μ s)

0.5 kA

Max. continuous voltage, U_c (AC)

30 V

Number of poles

1

Protection level U_p (typ.)

900 V

Protection level U_p for C1 with
500V/250A (wire-wire)

62 V

Protection level U_p for C2 with
10kV/5kA (wire-wire)

108 V

Protection level U_p for C3 with 1kV/ μ s
(wire-wire)

55 V

Protection level on output side Wire-wire
1 kV/ μ s, typically

70 V

Pulse-reset capacity

 ≤ 170 ms

Rated voltage (AC)

24 V

Requirements category acc. to IEC
61643-21

C2, C3, D1

Standards

IEC 61643-21, HART-
compatible

Surge current-carrying capacity C3

50 A 10/1000 μ s

Voltage type

AC/DC

Further details of approvals

GOST certificate

GOST-Zertifikat

Connection data

Type of connection

Screw connection

Tightening torque, max.

0.8 Nm

Clamping range, max.

4 mm²

Wire cross-section, solid, max.

6 mm²Conductor cross-section, flexible, AEH
(DIN 46228-1), max.4 mm²Connection cross-section, stranded,
max.4 mm²

Tightening torque, min.

0.5 Nm

Clamping range, min.

0.5 mm²

Wire cross-section, solid, min.

0.5 mm²Conductor cross-section, flexible, AEH
(DIN 46228-1), min.0.5 mm²

Connection cross-section, stranded, min.

0.5 mm²

Ratings IECEx/ATEX/cUL

cUL certificate

cUL Certificate

Classifications

ETIM 6.0

EC000943

ECLASS 9.0

27-13-08-07

ECLASS 10.0

27-13-08-07

ETIM 7.0

EC000943

ECLASS 9.1

27-13-08-07

ECLASS 11.0

27-13-08-07

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Technical data

Tender specification sheets

Long specification	Short specification
Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground signal circuit with 24 V UC, 2-wire technology. Each signal path can be opened using an isolator. A current loop with max. 0.6A can be protected here. When the terminal is fitted, a simultaneous electrically conducting contact is made between the mounting rail (earth) and the reference potential (ground) of the protection circuit in the terminal. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked.	Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground driven signal circuit with 2-wire technology and a common wire. Each signal path can be opened using an isolator. Version: 24V UC

Approvals

Approvals



ROHS	Conform
UL File Number Search	E311081

Downloads

Approval/Certificate/Document of Conformity	SIL Paper CE PAPER Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet VSSC

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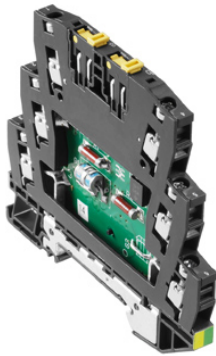
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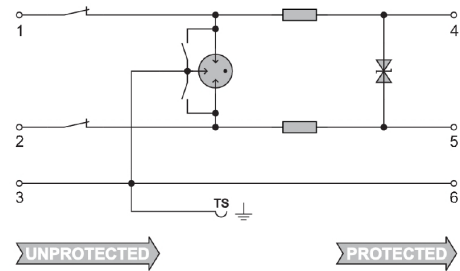
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Drawings



Similar to illustration



Circuit diagram

